

Notice of Allowability

Application No.

10/712,936

Examiner

George R. Koch III

Applicant(s)

LEE ET AL.

Art Unit

1734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/17/2007.
2. ☒ The allowed claim(s) is/are 1-5,7,11,13-47,52-83,86-106 and 108-117.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date 4/17/2007; 6/8/2007
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application
- ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
- ☒ Examiner's Amendment/Comment
- ☒ Examiner's Statement of Reasons for Allowance
- ☐ Other _____

EXAMINER'S AMENDMENT

1. This application is in condition for allowance except for the presence of claims 48-51, 84-85, 107 and 118 directed to invention non-elected without traverse. Accordingly, claims 48-51, 84-85, 107 and 118 been cancelled.
2. The drawings filed 11/14/2003 are approved by the examiner.

Allowable Subject Matter

3. Claims 1-5, 7, 11, 13-47, 52-83, 86-106, 108-117 are allowed.
4. Claims 1-5, 7, 11, 13-19, 31, 39-43 are allowed
5. The following is a statement of reasons for allowance: The prior art of record does not suggest a receiving groove arranged within an upper surface of the lower chamber unit for receiving a respective first shaft in the apparatus of claim 1, especially in combination with the already claimed sealing means. While locking components are generically known, there is no motivation in the prior art to include such shafts and receiving grooves in the apparatus of either Satoshi or Hashizume.
6. Claims 20-21 are allowed
7. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does suggest alignment cameras (both Satoshi and Hashizume disclose such structures) but does not suggest a plurality of cams and restoring means as claimed in claim 20 in the apparatus of claim 1.

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8. Claims 22-30, 108-111, and 112-117 are allowed

9. The following is a statement of reasons for allowance: The prior art of record does not suggest interval control grooves within a surface of the other of the upper and lower chamber units to which the sealing means is provided for receiving the sealing means in the apparatus of claim 1. Satoshi merely discloses using an O-ring sealing means without any groove.

10. Claims 32-38 are allowed

11. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not suggest interval control means fixed to one of the upper and lower chamber units for pushing against the other of the upper and lower chamber units on which the interval control means is fixed, and sealing means provided to a surface of one of the upper and lower chamber units in the apparatus.

12. Claims 44-47 are allowed

13. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not that the first alignment means includes an actuator fixed to the upper chamber unit and a shaft fixed to the actuator, and a receiving groove arranged within an upper surface of the lower chamber unit for receiving the shaft. While locking components are generically known, there is no motivation in the prior art to include such shafts and receiving grooves in the apparatus of either Satoshi or Hashizume.

14.

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15. Claims 52-83 are allowed.

16. The following is an examiner's statement of reasons for allowance: The prior art of record does disclose most of the limitations of claim 52 (see rejection of claim 1 above over Satoshi), but does not disclose or suggest interval control grooves arranged within a surface of one of the upper and lower chamber plates (for having the sealing means arranged within) in the apparatus. (Sealing means alone are disclosed in Satoshi)

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

17. Claims 86-106 are allowed.

18. The following is an examiner's statement of reasons for allowance: The prior art of record does disclose most of the limitations of claim 86 (see rejection of claim 1 above over Satoshi), but does not disclose or suggest interval control means fixed to one of the upper and lower chamber units for pushing against the other of the upper and lower chamber units on which the interval control means is fixed, and sealing means provided to a surface of one of the upper and lower chamber units in the apparatus.

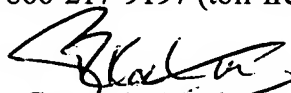
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R. Koch III whose telephone number is (571) 272-1230 (TDD only). If the applicant cannot make a direct TDD-to-TDD call, the applicant can communicate by calling the Federal Relay Service at 1-866-377-8642 and giving the operator the above TDD number. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip Tucker can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


George R. Koch III
Primary Examiner
Art Unit 1734

GRK
7/9/2007